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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|----------------------------------|---------------|-----------------------|-------------------------|-------------------------|--|--|
| 10/675,476 | 09/30/2003 | Anthony Gerard Gibart | 02AB161 | 02AB161 6013 | | |
| 75 | 90 06/13/2006 | | EXAMINER | | | |
| Susan M. Donahue | | | ALPHONS | ALPHONSE, FRITZ | | |
| Rockwell Autor 1201 South Sec | • | ART UNIT | PAPER NUMBER | | | |
| Milwaukee, Wl | 53204 | 2133 | | | | |
| | | | DATE MAILED: 06/13/2000 | DATE MAILED: 06/13/2006 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | | Applicant(s) | | | |
|---|--|---|--|--|--------------|--|--|
| Office Assistant Occurs | | 10/675,476 | | GIBART, ANTHONY GERARD | | | |
| | Office Action Summary | Examiner | 1 | Art Unit | | | |
| | | Fritz Alphonse | | 2133 | | | |
| Period fo | The MAILING DATE of this communication app or Reply | ears on the cover si | heet with the d | orrespondence ad | dress | | |
| WHIC - Exter after - If NC - Failu Any | CORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depend for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COM 36(a). In no event, however will apply and will expire SIX cause the application to be | MUNICATION , may a reply be tin (6) MONTHS from come ABANDONE | N. nely filed the mailing date of this α D (35 U.S.C. § 133). | | | |
| Status | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 30 Se | eptember 2003. | | | | | |
| 2a) <u></u> □ | This action is FINAL . 2b)⊠ This action is non-final. | | | | | | |
| 3) | | | | | | | |
| | closed in accordance with the practice under E | x parte Quayle, 19 | 35 C.D. 11, 4 | 53 O.G. 213. | | | |
| Dispositi | ion of Claims | | | | | | |
| 4)⊠ | Claim(s) 1-25 is/are pending in the application. | | | | | | |
| | 4a) Of the above claim(s) is/are withdraw | vn from consideration | on. | | | | |
| 5)□ | Claim(s) is/are allowed. | | | | | | |
| 6)⊠ | Claim(s) <u>1-6,9-17,24 and 25</u> is/are rejected. | | | | | | |
| | Claim(s) 7,8 and 18-23 is/are objected to. | | | | | | |
| 8) | Claim(s) are subject to restriction and/or | r election requireme | ent. | | | | |
| Applicati | ion Papers | | | | | | |
| 9)[| The specification is objected to by the Examine | r. | | | | | |
| 10)🖂 | The drawing(s) filed on 26 February 2004 is/are | e: a)⊠ accepted or | b)∏ objecte | d to by the Exami | ner. | | |
| | Applicant may not request that any objection to the | drawing(s) be held in | abeyance. Se | e 37 CFR 1.85(a). | | | |
| | Replacement drawing sheet(s) including the correcti | ion is required if the d | rawing(s) is ob | jected to. See 37 Cf | FR 1.121(d). | | |
| 11) | The oath or declaration is objected to by the Ex | aminer. Note the at | tached Office | Action or form PT | TO-152. | | |
| Priority ι | under 35 U.S.C. § 119 | | | | | | |
| | Acknowledgment is made of a claim for foreign All b) Some * c) None of: | | |)-(d) or (f). | | | |
| | 1. Certified copies of the priority documents2. Certified copies of the priority documents | | | : N I- | | | |
| | 2. Certified copies of the priority documents3. Copies of the certified copies of the prior | | | | Stago | | |
| | application from the International Bureau | • | | su in uns Nauuriai | Stage | | |
| * 5 | See the attached detailed Office action for a list | , , , | • | ed. | | | |
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| Attachmen | • • | _ | | | | | |
| | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) | | erview Summary per No(s)/Mail Da | | | | |
| 3) 🔲 Infor | mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) 🔲 No | tice of Informal F | Patent Application (PTC |)-152) | | |
| Pape | er No(s)/Mail Date | 6) ∐ Ot≀ | ner: . | | | | |

DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Particularly, as to claim 25, it is not clear to what it meant by "the network is selected from the group consisting of selected from the group consisting of:"

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-6, 9-17, 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma (U.S. Pat. No. 7,047,475) in view of Hornak (U.S. Pat. No. 5,438,621).

As to claim 13, Sharma (figs. 1-5) shows a method of communication between a producer node (i.e., sending node 162) and a consumer node (i.e., receiving node 164) over a high reliability network, the method comprising the steps of: (a) providing actual message data (fig. 2A; col. 4, lines 55 through col. 5 line 6); (b) generating first and second error detection codes (EDCs) a compressed representations related to the actual message data (note in figure 2A, CRC 88, 90, 92 and 94). Sharma (figs. 1-5) shows a method which is transmitting a message from the producer node to the consumer node, the message including the actual message data and the

Art Unit: 2133

overall EDC; at the consumer node, receiving the message over the network and calculating an expected overall EDC (col. 3, lines 55 through col. 4 line 13); and comparing the expected EDC to the received EDC to determine whether data had been corrupted during the transmission of the message (col. 13, lines 16-53).

Sharma differs from claim 13 in that he does not explicitly disclose "generating an overall EDC as a compressed representation of the first and second phantom EDCs." However, the limitation is obvious and well known in the art, as evidenced by Hornak (col. 7, lines 8-36).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to combine Sharma with the method of encoding data, as disclosed by Hornak.

Doing so would provide a balanced data stream including timing and control signals with minimum degradation of the data rate.

As to claims 2-6 and 14-17, Sharma (fig. 2A) discloses a method, which prepares actual message data and complementary message data, transmits the complementary message data to the consumer node, and further receiving the actual and complementary message data (col. 4, lines 55-67).

As to claims 9-12 and 24-25, Sharma (figs. 1-5) discloses a method, which enters a safety state upon detection of corrupted data (col. 5, lines 35-65), the method including a network selected from a group consisting of any type of network (i.e., Ethernet, DeviceNet, ControlNet, FireWire or FieldBus). See col. 6, lines 37-47.

As to claim 1, the claim has substantially the limitations of claim 13; therefore, it is analyzed as previously discussed in claim 1 above.

Allowable Subject Matter

5. Claims 7-8, 18-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

or faxed to: (703) 872-9306 for all formal communications.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse, whose telephone number is (571) 272-3813. The examiner can normally be reached on M-F, 8:30-6:00, Alt. Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert De Cady, can be reached at (571) 272-3819.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Application/Control Number: 10/675,476

Art Unit: 2133

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Art Unit 2133

June 8, 2006

Page 5

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